Richard Axel

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3899693/publications.pdf

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39 papers 18,293 citations

31 h-index

147801

302126 39 g-index

46 all docs

46 docs citations

46 times ranked

10443 citing authors

#	Article	IF	CITATIONS
1	A novel multigene family may encode odorant receptors: A molecular basis for odor recognition. Cell, 1991, 65, 175-187.	28.9	4,469
2	Visualizing an Olfactory Sensory Map. Cell, 1996, 87, 675-686.	28.9	1,825
3	Topographic organization of sensory projections to the olfactory bulb. Cell, 1994, 79, 981-991.	28.9	1,172
4	A Spatial Map of Olfactory Receptor Expression in the Drosophila Antenna. Cell, 1999, 96, 725-736.	28.9	1,104
5	An Olfactory Sensory Map in the Fly Brain. Cell, 2000, 102, 147-159.	28.9	973
6	The neuronal architecture of the mushroom body provides a logic for associative learning. ELife, 2014, 3, e04577.	6.0	833
7	Two-Photon Calcium Imaging Reveals an Odor-Evoked Map of Activity in the Fly Brain. Cell, 2003, 112, 271-282.	28.9	752
8	A Chemosensory Gene Family Encoding Candidate Gustatory and Olfactory Receptors in Drosophila. Cell, 2001, 104, 661-673.	28.9	636
9	soluble form of CD4 (T4) protein inhibits AIDS virus infection. Nature, 1988, 331, 82-84.	27.8	604
10	Crystal structure of an HIV-binding recombinant fragment of human CD4. Nature, 1990, 348, 419-426.	27.8	599
11	Representations of Odor in the Piriform Cortex. Neuron, 2009, 63, 854-864.	8.1	561
12	Spatial Representation of the Glomerular Map in the Drosophila Protocerebrum. Cell, 2002, 109, 229-241.	28.9	530
13	A single population of olfactory sensory neurons mediates an innate avoidance behaviour in Drosophila. Nature, 2004, 431, 854-859.	27.8	500
14	Distinct representations of olfactory information in different cortical centres. Nature, 2011, 472, 213-216.	27.8	409
15	Random convergence of olfactory inputs in the Drosophila mushroom body. Nature, 2013, 497, 113-117.	27.8	373
16	The Drosophila pheromone cVA activates a sexually dimorphic neural circuit. Nature, 2008, 452, 473-477.	27.8	343
17	A dimorphic pheromone circuit in Drosophila from sensory input to descending output. Nature, 2010, 468, 686-690.	27.8	312
18	Visualizing Neuromodulation In Vivo: TANGO-Mapping of Dopamine Signaling Reveals Appetite Control of Sugar Sensing. Cell, 2012, 148, 583-595.	28.9	272

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19	Optimal Degrees of Synaptic Connectivity. Neuron, 2017, 93, 1153-1164.e7.	8.1	267
20	The participation of cortical amygdala in innate, odour-driven behaviour. Nature, 2014, 515, 269-273.	27.8	235
21	Neural Representations of Unconditioned Stimuli in Basolateral Amygdala Mediate Innate and Learned Responses. Cell, 2015, 162, 134-145.	28.9	192
22	Generating sparse and selective third-order responses in the olfactory system of the fly. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10713-10718.	7.1	180
23	Recurrent Circuitry Dynamically Shapes the Activation of Piriform Cortex. Neuron, 2011, 72, 49-56.	8.1	175
24	Scents and Sensibility: A Molecular Logic of Olfactory Perception (Nobel Lecture). Angewandte Chemie - International Edition, 2005, 44, 6110-6127.	13.8	149
25	Representational drift in primary olfactory cortex. Nature, 2021, 594, 541-546.	27.8	145
26	Editing of glutamate receptor subunit B pre-mRNA in vitro by site-specific deamination of adenosine. Nature, 1995, 374, 77-81.	27.8	133
27	Representations of Novelty and Familiarity in a Mushroom Body Compartment. Cell, 2017, 169, 956-969.e17.	28.9	113
28	Context-Dependent Decision Making in a Premotor Circuit. Neuron, 2020, 106, 316-328.e6.	8.1	67
29	Acetic acid activates distinct taste pathways in Drosophila to elicit opposing, state-dependent feeding responses. ELife, 2019, 8, .	6.0	53
30	Transient and Persistent Representations of Odor Value in Prefrontal Cortex. Neuron, 2020, 108, 209-224.e6.	8.1	50
31	Odor Perception on the Two Sides of the Brain: Consistency Despite Randomness. Neuron, 2018, 98, 736-742.e3.	8.1	47
32	The pheromone darcin drives a circuit for innate and reinforced behaviours. Nature, 2020, 578, 137-141.	27.8	44
33	Identifying Functional Connections of the Inner Photoreceptors in Drosophila using Tango-Trace. Neuron, 2014, 83, 630-644.	8.1	42
34	Olfactory landmarks and path integration converge to form a cognitive spatial map. Neuron, 2021, 109, 4036-4049.e5.	8.1	28
35	Evolving the olfactory system with machine learning. Neuron, 2021, 109, 3879-3892.e5.	8.1	20
36	Individual bitter-sensing neurons in Drosophila exhibit both ON and OFF responses that influence synaptic plasticity. Current Biology, 2021, 31, 5533-5546.e7.	3.9	19

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37	A virtual burrow assay for head–fixed mice measures habituation, discrimination, exploration and avoidance without training. ELife, 2019, 8, .	6.0	14
38	Embryonic development of the camouflaging dwarf cuttlefish, <scp><i>Sepia bandensis</i></scp> . Developmental Dynamics, 2021, 250, 1688-1703.	1.8	6
39	Synaptic Organization of Anterior Olfactory Nucleus Inputs to Piriform Cortex. Journal of Neuroscience, 2020, 40, 9414-9425.	3.6	1